

# NATIONAL IMAGINATION COMPUTER CLUB

\* 515 Shadylane-Barrington-Illinois-60010

~~1982~~ 1982 OCT. - 1 1982

First, we have gotten several complaints/problems with the programs published in the newsletters. They are all printed directly from the APF computer after we have run the programs to insure they work. Hard as it may be to believe, those of you who are having problems need to recheck you input. Next, we have been told there are no back issues available.

\*\*\*\*\*

## ANSWERS/TIPS/QUESTIONS FROM OTHER CLUB MEMBERS

\*\*\*\*\*

FROM G. TAYLOR OF MUSCLE SHOALS, ALABAMA

Radio Shack book #62-2015, "Computer Programming in Basic for Everyone" has programs that, with minor changes, will load into the IM-1.

-----  
FROM and TO DAN FERGUSON OF LORTON, VA

1) His tip - Dim A\$(49,8) allocates space for 50 instances of the string A\$ which is 8 characters long. When A\$ is referenced in programs like A\$(n) as in other dialects of basic, it doesn't work, you will get ILLEGAL VARIABLE message. You must reference it as A\$(N,0). Mr. Ferguson states this is not referenced in any APF documentation he has seen.

2) Q - Shouldn't I be able to place several IF THENs on the same line?

A - No, because the first time it finds the condition untrue the program continues on to the next line. This cannot be done on other computers either.

3) Tip - The following manual is available from the of the IM-1 chip - "6800 PROGRAMMING REFERENCE MANUAL" M68PRM(D) Send \$3.00 to Motorola Semi-Conductor products, Box 20912, Phoenix, AZ 85036

- 4) Documentation for using peripherals with the IM-1 does come with the peripheral, such as the Disk Drive, RS232 port, etc. In the case of a printer, the information available with the RS232 as well as information standard to the computer is needed. There is no one book on a printer with the IM-1 since everyone uses different printers. You may need to change pin configuration on the printer. We will publish a short section on hardware/software required in the next newsletter.
- 

TO J. H. SCHARFELD OF HOLLYWOOD, FLORIDA

- 1) Q - Is there anyway to force the machine to start a sequence (of random numbers) at a different spot each running?

A - Yes, your line was almost correct, all we did was move your 36 as follows:

```
10X=INT(RND(1)*36)
```

- 2) Q - Is there anyway to use a variable in a music command?

A - We have tried and cannot do it, is there any other club member that possibly has accomplished this and could let us know?

- 3) Q - In trying to work out an amortization program - everything works but the -NMY.

A - We have received several letters regarding the difficulty of writing an amortization program - it appears to us that the IM-1 has a problem with negative exponential, if anyone knows the real reason, please let us know. We have published several amortization programs - HOME LOAN BALANCE - September issue and AMORTIZATION SCHEDULE - July/August issue.

---

TO J. CLATFELTER OF CALIFORNIA

1. Q - Is there a way I can program the IM-1 to print characters of a foreign alphabet?

A - No, not in letter size, you can go in a draw them in the graphics mode, however, they will be a little larger.

2. Q - Can I use the port in the back of the computer to connect the printer without having to use the Building Block interface?

A - We do not believe you can, not only do you require the building block but also the RS232 to connect a printer. The port in the computer is not compatible with this.

---

-----  
FROM ONSY I. YOUSEF OF CHESTNUT HILL, MA

Mr. Yousef is interested in obtaining an APF SERVICE MANUAL which are sold out, is any club member willing to sell his/her copy, swap it toward an APF PROGRAMMING & TECHNICAL ASSISTANCE MANUAL, or even lend him a copy?

-----

FROM M. B. SOUZA OF SOMERSET, MASSACHUSETTS

Does anyone know of a way he could use the Commodore Pet with the APF machine? He has a 32k PET with either "old" or "upgrade" Ross.

-----

FROM STEVE KAIFESH OF CALUMET, MICHIGAN

- 1) Q - When I do cload or csave, is the audio on the cassette supposed to shut off when the operation is over?  
A - No, normally, it will continue to run.
- 2) Q - Is there supposed to be alot of humming and static with a csave or cload?  
A - We have found there to be with ours, yes.

\*\*\*\*\*

#### ITEMS FOR SALE

\*\*\*\*\*

24K MEMORY EXPANSION - kit expands the 23K to 47K, 24K user available. There are three kits:

- 1-16K Internal -----\$4.95+2.50 postage  
2-24K External - requires DB-1 and RB-K-----\$4.95+2.50 postage  
3-24K Internal - does not require the above-\$4.95+2.00 postage

They all come with parts needed and complete instructions (the sections include introduction, circuit description, installation, identification charts, operation and even a section in case of trouble. All are completely compatible with all existing software and have a 60 day warrant on parts. California residents add 6.5% tax please. Send check or money order to:

R.L. RECKER  
10526 HALLISON AVE.  
SOUTH GATE, CA 90815

\*\*\*\*\*

PROGRAMS FROM OTHER CLUB MEMBERS

\*\*\*\*\*

STAR TREK

.....from STEPHEN STRUNK OF VIRGINIA

```
3  POKE 24576,54
4  CALL 17046
5  PRINT "      ** S T A R   T R E K **"
6  PRINT : PRINT : PRINT : PRINT : PRINT
10 B4=1
20 DIM I(25)
30 PRINT "DO YOU WANT INSTRUCTIONS (YES OR NO)";
35 DIM A$(3)
40 INPUT A$
50 IF A$="NO" THEN 342
60 IF A$="NO" THEN 342
70 Q=67
75 CALL 17046
80 PRINT "WHILE ON PATROL NEAR TRISKELLION-7...  THE USS ENTERPRIZE IS CONFRONT
ED BY"
95 PRINT " A   K L I N G O N   B A T T L E               C R U I S E R"
120 PRINT TAB (10); " WEAPONRY"
140 PRINT "2 FORWARD PHASER BANKS, RANGE:   300,000 KM."
150 PRINT "1 REAR PHASER, RANGE: SAME"
180 PRINT "2 FORWARD PHOTON TORPEDO BANKS, RANGE 20,000 TO 600,000 KM."
200 PRINT "1 REAR PHOTON TORPEDO BANK, RANGE: SAME"
210 PRINT "FOR MORE INSTRUCTIONS,HIT (B)"
220 DIM B$(1)
230 B$= KEY$(0); IF B$<>"B" THEN 230
231 CALL 17046
232 PRINT TAB (5); "M A N E U V E R S "
233 PRINT
250 PRINT "1-FIRE FORWARD PHASERS"
260 PRINT "2-FIRE REAR PHASER"
270 PRINT "3-FIRE FORWARD PHOTON TORPEDO"
280 PRINT "4-FIRE REAR PHOTON TORPEDO"
290 PRINT "5-ACTIVATE AUTO DISTRUCT"
300 PRINT "6-SURRENDER"
310 PRINT "7-ATTEMPT TO BREAK CONTACT GO      INTO WARP DRIVE!"
320 PRINT "8-MOVE CLOSER TO THE KLINGON"
329 PRINT
330 PRINT "ALL VECTOR HEADINGS WILL BE BE- TWEEN 0 AND 180 DEGREES."
340 DIM B$(1)
341 B$= KEY$(0); IF B$<>"B" THEN 341
342 CALL 17046
350 PRINT "      KLINGON COMING INTO RANGE--SHIELDS ON!"
360 READ R,H,P,X,A
370 DATA 85000,0,0,-1,97,3304
470 B= RND (X)
490 GOSUB 1370
```

STAR TREK (continued)

```

500 PRINT "THE RANGE=";R;" KM, AT A VECTOR HEADING OF ";A;" DEGREES"
510 GOSUB 620
520 IF H>8 THEN 2560
530 IF E=6 GOTO 2700
540 IF E=5 GOTO 2610
550 IF R>600000 THEN 2690
560 GOSUB 1100
570 IF P>8 GOTO 2610
580 IF K=7 GOTO 500
590 GOTO 490
620 W=2
630 PRINT "WHAT IS YOUR MOVE?";
640 INPUT E
650 GOSUB 1490
660 IF D>0 THEN 630
670 ON E GOTO 680,790,810,850,900,940,980,1030
680 IF A>90 THEN 730
690 B= RND (X)
700 IF B>.2 GOTO 770
710 PRINT "COMPLETE MISS, YOUR AIM IS OFF"
720 RETURN
730 PRINT "MISS, INCORRECT VECTOR ANGLE"
740 PRINT "REMEMBER THAT BETWEEN 0 AND 90 DEGREES IS FORWARD"
750 PRINT "AND THAT BETWEEN 90 AND 180 IS REARWARD"
760 RETURN
770 GOSUB 2000
780 RETURN
790 IF A<90 THEN 730
800 IF B>.4 GOTO 770
805 GOTO 710
810 IF A>90 THEN 730
820 B= RND (X)
830 IF B>.1 GOTO 770
840 GOTO 710
850 IF A<90 THEN 730
860 B= RND (X)
870 IF B>.2 GOTO 770
880 GOTO 710
900 PRINT TAB (8);"A C T I V A T E D"
920 PRINT "10 9 8 7 6 5 4 3 2 1 0"
930 RETURN
940 PRINT "ON BEHALF OF THE KLINGON EMPIRE, I ACCEPT YOUR SURRENDER."
960 PRINT TAB (10);"PREPARE TO BE BOARDED"
970 RETURN
980 R=R+(200000.* RND (X))
990 IF R<600000 THEN 1010
1000 RETURN
1010 PRINT "CONTACT NOT BROKEN, NEW DISTANCE=";R;" KM."
1020 RETURN
1030 IF R<200000. THEN 1060
1040 R=R-200000.* RND (X)
1050 RETURN
1060 R=R/2
1070 RETURN

```

STAR TREK(continued)

```

1100 W=1
1110 K= INT ((7* RND (X))+1)
1120 GOSUB 1490
1130 IF N>0 THEN 1110
1140 ON K GOTO 1150,1150,1180,1180,1180,1230,1290
1150 PRINT "KLINGON FIRES PHOTON TORPEDO"
1160 GOSUB 2000
1170 RETURN
1180 PRINT "KLINGON FIRES PHASERS AT ENTER- PRIZE."
1190 LET B= RND (X)
1200 IF B<.2 THEN 1160
1210 PRINT "YOU OUTMANEUVERED HIM, MISS."
1220 RETURN
1230 PRINT "KLINGON ATTEMPTING TO BREAK CONTACT..."
1240 R=R+(200000.* RND (X))
1250 IF R<600000 THEN 1270
1260 RETURN
1270 PRINT "CONTACT NOT BROKEN"
1280 RETURN
1290 PRINT "KLINGON APPROACHING"
1300 IF R<200000. THEN 1330
1310 R=R-200000.* RND (X)
1320 RETURN
1330 R=R/2
1340 RETURN
1370 B= RND (X)
1380 IF B>.5 THEN 1410
1390 R=R+(10000.* RND (X))
1400 GOTO 1420
1410 R= ABS (R-(10000.* RND (X)))
1420 A=A+(100.* RND (X))
1430 IF A<180 THEN 1450
1440 RETURN
1450 A=A-180
1460 GOTO 1430
1490 IF W=1 THEN 1750
1500 IF E<5 THEN 1530
1510 Q=0
1520 RETURN
1530 IF E<3 THEN 1700
1540 IF R>600000. THEN 1590
1550 IF D=5 THEN 1630
1560 IF R<200000. THEN 1590
1570 Q=0
1580 RETURN
1590 PRINT "THE RANGE OF A PHOTON TORPEDO IS 20,000 TO 600,000 KM."
1600 GOTO 1670
1610 PRINT "YOUR PHASERS HAVE BEEN DESTROYED ALREADY!"
1620 GOTO 1670
1630 PRINT "THE RANGE OF A PHASER IS 300,000 KM."
1640 GOTO 1670
1650 PRINT "YOUR WEAPONS HAVE BEEN DESTROYED ALREADY"
1660 GOTO 1670

```

STAR TREK(continued)

```

1670 PRINT "MOVE IMPOSSIBLE, TRY AGAIN"
1680 Q=1
1690 RETURN
1700 IF R>300000. THEN 1630
1710 IF D=4 THEN 1610
1720 IF D=5 THEN 1650
1730 Q=0
1740 RETURN
1750 IF R>5 THEN 1660
1760 IF K>2 THEN 1840
1770 IF R>600000. THEN 1820
1780 IF R<20000. THEN 1820
1790 IF H>7 THEN 1820
1800 N=0
1810 RETURN
1820 N=1
1830 RETURN
1840 IF R>300000. THEN 1820
1850 IF H>6 THEN 1820
1860 N=0
1870 RETURN
1880 IF P<H+1 THEN 1950
1890 IF P<H-1 THEN 1920
1900 N=0
1910 RETURN
1920 IF K=7 THEN 1820
1930 N=0
1940 RETURN
1950 IF K=6 THEN 1820
1960 N=0
1970 RETURN
2000 B= RND (X)
2010 IF B>.75 THEN 2120
2020 IF B>.1 GOTO 2050
2030 PRINT "NEAR MISS"
2040 RETURN
2050 IF W=1 THEN 2085
2060 PRINT "HIT ON KLINGON BATTLE CRUISER"
2070 H=H+1
2080 GOTO 2380
2085 IF B<.4 GOTO 2030
2090 PRINT "HIT ON THE USS ENTERPRISE,"
2091 PRINT "DAMAGE REPORT-"
2100 P=P+1
2110 GOTO 2180
2120 IF W=1 THEN 2160
2130 PRINT "DIRECT HIT ON KLINGON VESSEL, DAMAGE REPORT-"
2140 H=H+2
2150 GOTO 2380
2160 PRINT "DIRECT HIT ON ENTERPRISE, DAMAGE REPORT-"
2170 P=P+2
2180 IF P<9 THEN 2210

```

STAR TREK (continued)

```

2190 D=1
2200 RETURN
2210 IF P=6 THEN 2290
2220 IF P=7 THEN 2310
2230 IF P=8 THEN 2340
2240 IF P>3 THEN 2270
2250 PRINT "SHIELDS HOLDING - NO DAMAGE"
2260 RETURN
2270 PRINT "SHIELDS WEAKENING - MINDR DAMAGE IN MIDSHIPS"
2280 RETURN
2290 PRINT "ALL SHIELDS DESTROYED - DAMAGE TO OUTER HULL"
2300 RETURN
2310 D=4
2320 PRINT "PHASERS DEACTIVATED - DILITHIUM CRYSTALS OVERHEATING"
2330 RETURN
2340 D=5
2350 PRINT "ALL WEAPONS DESTROYED - POWER DROPPING"
2360 PRINT "MAJOR DAMAGE TO WARP ENGINES"
2370 RETURN
2380 IF H=9 THEN 2410
2390 D=8
2400 RETURN
2410 IF H=8 THEN 2530
2420 IF H=7 THEN 2510
2430 IF H=6 THEN 2490
2440 IF H>3 THEN 2470
2450 PRINT "SHIELDS HOLDING - NO DAMAGE"
2460 RETURN
2470 PRINT "SHIELDS WEAKENING - MINDR DAMAGE"
2480 RETURN
2490 PRINT "ALL SHIELDS DESTROYED - HULL DAMAGE"
2500 RETURN
2510 PRINT "PHASER BANKS DESTROYED - MAJOR DAMAGE FORE AND AFT"
2520 RETURN
2530 D=7
2540 PRINT "ALL WEAPONS ON KLINGON VESSEL DEACTIVATED, POWER DROPPING"
2550 RETURN
2560 PRINT TAB (3); "C D N G R A T U L A T I D N S"
2570 PRINT
2580 PRINT "KLINGON VESSEL DESTROYED"
2590 PRINT
2600 GOTO 2700
2610 PRINT TAB (7); "ENTERPRISE DESTROYED"
2620 PRINT
2630 IF E=5 THEN 2650
2640 D=10000.*RND (X); GOTO 2660
2650 D=100000.*RND (X)
2660 PRINT "    RADIUS OF MATTER-ANTIMATTER EXPLDSIDN=";D;" KM."
2670 IF R<D THEN 2580
2680 GOTO 2700
2690 PRINT "CONTACT BROKEN, RETURN TO BASE"
2700 PRINT "AGAIN (YES OR NO)";
2705 GOTO 2760

```



# STAR TREK (continued)

```

2710 PRINT " STAR FLEET HAS DETERMINED THAT YOU ARE TOO BLOOD-THIRSTY."
2720 PRINT " THEREFORE, IT HAS BEEN DECIDED THAT YOU WILL NOT BE ALLOWED"
2730 PRINT "TO CONTINUE ON THIS RAMPAGE OF"
2740 PRINT "KILLING POOR LITTLE DEFENSELESS"
2741 PRINT "KLINGONS!"
2742 PRINT TAB (10);"ADMIRAL WESTLAKE,"
2750 PRINT " STAR FLEET COMMAND"
2751 GOTO 2820
2760 INPUT A$
2770 RESTORE
2780 IF S4=4 THEN 2710
2790 IF A$="YES" THEN 2810
2800 IF A$<>"YES" THEN 2820
2810 S4=S4+1
2811 GOTO 350
2820 PRINT ""
2821 END

```

\*\*\*\*\*

## SQUARE ROOT

.....from PAUL SCHNEIDER OF ILLINOIS

```

10 INPUT "NUMBER WHOSE SQUARE ROOT YOU WANT",N
20 INPUT "YOUR GUESS ",A
30 B=(A^2+N)/(2*A)
40 IF B=A THEN GOTO 70
50 A=B
60 GOTO 30
70 PRINT "THE SQUARE ROOT OF "N" IS "B

```

\*\*\*\*\*

## CUBE ROOT

.....also from PAUL SCHNEIDER OF ILLINOIS

```

10 INPUT "NUMBER WHOSE CUBE ROOT YOU WANT",N
20 INPUT "YOUR GUESS",A
30 B=(A+A*A+2+N)/(A*A+2)
40 IF B=A THEN GOTO 70
50 A=B
60 GOTO 30
70 PRINT "THE CUBE ROOT OF "N" IS "B

```



**APF****FANTASTIC!****SANTA CLAUS SALE!!**  
(GIVEAWAY PRICES!)**Product Catalog  
and Price List  
UNTIL 12-25-82****LIMITED  
QUANTITIES!!****COMPUTER PRODUCTS**~~UNTIL 12-25-82~~

	LIST PRICE	SANTA SALE FACTORY PRICE
<b>23K APF IM-1 COMPUTER.</b> Includes 14,000 Bytes ROM with BASIC built in, 9000 Bytes User RAM, Color, Sound. Professional 53 keyboard, Two controllers, Two 10 key numeric pads, High speed cassette, A. C. adaptor, R. F. Modulator, T.V. switch box. Accepts TAPE-DISK-PLUG in cartridges. It is plug in expendable. 90 days parts and labor warranty, Owners guide, BASIC language manual, Beautiful Black & White Console Case.	\$599.00	\$239.00

<b>23K APF IM-1 COMPUTER FACTORY PACK.</b> Everything you get for \$239.00 plus "BASIC TUTOR program" on two tape cassettes with manual to teach you how to cut programming time, "PROGRAMMING AND TECHNICAL ASSISTANCE MANUAL" for Graphics Machine Language-Memory maps, Schematics and Parts List. Also you get the popular "SPACE DESTROYERS Program."	698.00	289.00
--	--------	--------

<b>88-1 BUILDING BLOCK INTERFACE.</b> This plug in interface allows you to use the 23K IM-1 computer to its fullest degree. It contains 4 universal ports to add: RAM memory, Printers, Telephone Modem, and Floppy Disk drives. (5.00 shipping)	199.00	\$ 49.50 <del>299.00</del>
--	--------	-------------------------------

<b>8K-RAM EXPANSION.</b> Plug into interface port to increase your RAM memory \$192 Bytes. (3.00 shipping)	129.00	\$ 49.50 <del>29.50</del>
--	--------	------------------------------

<b>SI-232 SERIAL INTERFACE.</b> Plug in to interface port to connect printers and telephone modems. (3.00 shipping)	149.00	\$ 49.50 <del>49.00</del>
---	--------	------------------------------

<b>MX-80 EPSON LINE PRINTER.</b> Deluxe quality: Impact dot matrix-bi-directional, 40-80-66 132 columns-uses regular paper. <del>2K BUFFER</del> WITH GRAPHICS	726.00	\$ 49.50 <del>485.00</del> <del>2120.00</del>
--	--------	---

<b>TM-150 TELEPHONE MODEM.</b> Best quality: Transmit receive full duplex, switches! Originate-off-answer. (4.00 shipping)	199.00	\$ 49.50 <del>129.00</del>
--	--------	-------------------------------

<b>FI-100 DISK INTERFACE.</b> Plug into interface port - allows you to connect the floppy disk drive. (\$3.00 shipping)	149.00	\$ 49.50 <del>29.00</del>
---	--------	------------------------------

<b>Q-100 MINI FLOPPY DISK DRIVE.</b> Plugs into interface - has its own power supply and controller - uses no RAM memory, give you 72,000 Bytes of additional data storage, plus instant loading and accessing of data. (7.50 shipping)	599.00	\$ 49.50 <del>399.00</del>
---	--------	-------------------------------

**PROGRAMMING AND LANGUAGE AIDS**

<b>BASIC TUTOR.</b> This program includes two cassette tape programs with a 243 page manual - teaches you how to use the simplified Level II BASIC cuts programming time - a must for beginners and professionals.	49.95	\$ 19.95 <del>29.95</del>
--	-------	------------------------------

<b>PROGRAMMING AND TECHNICAL ASSISTANCE MANUAL.</b> 100 pages, graphics, memory maps, machine language, schematics, and parts list.	19.95	\$ 9.95 <del>29.95</del>
---	-------	-----------------------------

<b>6800 MACHINE LANGUAGE EDITOR AND ASSEMBLER.</b> This disk program is used to create source code file - this file is then used as the assembler - simplifies entry or editing, adding, deleting, change in lines, etc.	59.95	\$ 19.95 <del>29.95</del>
--	-------	------------------------------

<b>6800 MACHINE LANGUAGE DISASSEMBLER.</b> This disk enhances creation, debugging, and recording of machine language.	19.95	\$ 9.95 <del>29.95</del>
---	-------	-----------------------------

<b>DISK COPIER PROGRAM.</b> Allows you to make duplicate copies of all disk programs written for the APF-IM-1.	19.95	\$ 7.95 <del>19.00</del>
--	-------	-----------------------------

<b>NATIONAL COMPUTER CLUB MEMBERSHIP.</b> Allows special discount prices - 1983 owner programming assistance-new developments-program exchange-factory sponsored. 12-15-82		\$ 10.00
--	--	----------

We ship C.O.D., Honor Visa and  
MASTER CARDS

\*Add \$15.00 for shipping - if  
C.O.D., add \$5.00 more.

\*\*Add \$3.00 for postage - if  
C.O.D., add \$2.00 more.

**PROTECTO  
ENTERPRISES**

(FACTORY DIRECT RELIABILITY)

BOX 560, BARRINGTON, ILLINOIS 60010 - Phone 312/382-6744 in color

# UNTIL 12-25-82 LIMITED QUANTITIES!

## MANAGEMENT PROGRAM TAPES

	FACTORY PRICE	SALE PRICE
<u>ELECTRONIC FILES</u> This is a computer filing system that allows you to keep track of names, addresses, and other records.	\$ 29.95	\$ 19.95
<u>BAR CHARTS</u> Color charts for comparisons, year to year category by category - See your situation at a glance!	19.95	\$ 9.95
<u>TYPING TUTOR</u> Learn typing at your own speed-unique program-Computer designs end changes to fit your ability.	29.95	\$ 9.95
<u>CHECK BOOK BUDGET MANAGER</u> Faster way to balance your check book- Balance your budget - Keep tax records, etc!	29.95	\$ 14.95
<u>BUDGET MANAGER</u> Day by day, week by week, 3 categories, including food, medical, automotive - even summary reports.	19.95	\$ 9.95
<u>PERSONAL BUSINESS MACHINE</u> Calculate loans, interest, principle payments, loan payments, etc.	29.95	\$ 14.95
<u>BILLBOARD</u> Great for creating messages in sound, color, and graphics with a beautiful display.	19.95	\$ 9.95
<u>SPACE SIZE AND SURFACE GUIDE</u> Great for home improvements, figure your material needs - How much Paint - Carpeting - Fertilizer, etc.	29.95	\$ 9.95
<u>MATH TUTOR</u> Great for improving math skills at any age level, based on personal ability - a private tutor with lots of fun.	29.95	\$ 14.95
<u>THE WORD FACTORY</u> A spelling game that's fun - spell name of object pictured - great to improve your kids spelling skill and adult too!	19.95	\$ 9.95
<u>SPELLING DUEL</u> Challenging and educational. Great fun with combination spelling and crossword game!	19.95	\$ 9.95
<u>JUMBLED UP THINGS</u> Create words from jumbled up letters against the clock - Great educational program to improve your memory.	29.95	\$ 9.95
<u>PERCEPTION</u> Learning game - Two players any level compete - Improves your ability to solve problems.	19.95	\$ 9.95
<u>ARTIST AND EASEL</u> Great color art program for those who like to paint, doodle - Save your masterpiece - Use your imagination.	19.95	\$ 9.95
<u>MUSIC COMPOSER</u> Practice on keyboard, select key and tempo, write a tune and record it.	19.95	\$ 9.95
<u>SPACE DESTROYERS</u> The most popular space game played - Hold off the invaders, save the earth from destruction!	29.95	\$ 14.95

## GAME CARTRIDGES

	FACTORY PRICE	SALE PRICE
<u>RAMBLAN</u> Tic-Tac-Toe, Doodle. Two competitive games, plus the electronic art of Doodles.	\$ 19.95	\$ 9.95
<u>U.F.O.</u> Shoot-a-Lot, Sea Monsters, Break-it-Down. Two great adventures in space and the deep, and two challenging carnival games.	19.95	\$ 9.95
<u>SHOOTING GALLERY</u> Brickdown-it takes smart shooting to get all bricks, and a steady aim.	19.95	\$ 9.95
<u>PINBALL</u> Blockout, Dungeon Hunt, Electronic Flippers and tricky ball speed changes in pinball. In Dungeon, search and score.	19.95	\$ 9.95
<u>CASINO</u> Roulette, Keno, Slot Machine. All games are played by the reel Las Vegas rules. Even has the authentic sounds of the casino, too!	19.95	\$ 9.95
<u>BLACK JACK</u> Great practice! You'll really clean up at the real thing! Smart decisions, not always luck, determine if you beat the machine.	19.95	\$ 9.95
<u>BASEBALL</u> THE GREAT American pastime can still be great - even when the weather isn't.	19.95	\$ 9.95
<u>BOXING</u> Features 2 boxers battling toe to toe like Dempsey and Firpo! 6 variations.	19.95	\$ 9.95
<u>BACKGAMMON</u> This ancient game has never been more popular - and it really comes to life in all the colors of your TV screen.	19.95	\$ 9.95
<u>CATENA</u> Surround your opponent, but watch out for the last minute reversals.	19.95	\$ 9.95

WARRANTY - 90 DAYS PARTS AND LABOR If unit fails within 90 days of purchase, send unit and sales receipt prepaid via United Parcel Service to PROTECTO ENTERPRISES at address shown. We will ship you a replacement unit within 48 hours of receipt prepaid.

SERVICE MANUAL Detailed service instructions and pictures for those who want to service their computer. (not available) 19.95 14.95